



# Amendment Report

## Application for Licence Amendment

### Part V Division 3 of the *Environmental Protection Act 1986*

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<b>Licence Number</b>	L9417/2023/1
<b>Applicant</b>	Kumina Iron Pty Ltd
<b>ACN</b>	169 725 973
<b>File number</b>	DWERVT15754
<b>Premises</b>	Onslow Camp Dunes Shire of Ashburton Legal description - M08/488, G08/80, L08/127 and Pastoral Lease 3114/905
<b>Date of report</b>	19 December 2024
<b>Decision</b>	Licence granted

#### **A/SENIOR MANAGER, RESOURCE INDUSTRIES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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## 1. Decision summary

Licence L9417/2023/1 is held by Kumina Iron Pty Ltd (Licence Holder) for the Onslow Camp Dunes Project (the Premises), located at M08/488, G08/80, L08/127 and Pastoral Lease 3114/905.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9417/2023/1 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

### 2.2 Application summary and overview of premises

The premises is located approximately 13 kilometres (km) south of the town of Onslow, within the Shire of Ashburton, in the Rangelands region of Western Australia. Currently, there is some overlap between this premises and a neighbouring prescribed premises (L8529/2011/1), however this is anticipated to be resolved shortly as the department is assessing an amendment and transfer request which will remove the overlapping boundary from L8526/2011/1.

On 1 July 2024, the Licence Holder submitted an application to the department to amend Licence L9417/2023/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The Licence currently only authorises prescribed premises category 54: Sewage facility. The following amendments are being sought.

The addition of the following prescribed premises category and the construction and operation of the associated infrastructure:

- Category 12: A mobile crushing and screening plant designed to process 2 million tonnes per annum (mtpa) of dune sand to supply construction activities in the surrounding areas.

The addition of the following prescribed premises categories and operation of the associated infrastructure:

- Category 57: Used tyre storage area to store up to 2,800 used tyres;
- Category 73: Operation of containment units for diesel and oil storage; and
- Category 77: Operation of a 60 m<sup>3</sup>/hour concrete batching plant.

The amendment of the associated infrastructure and operation of the following prescribed premises category authorised under the current licence:

- Category 54: The amendment to the discharge point for the treated wastewater from the Truck Maintenance Facility (TMF) from a dripper field to a spray field.

The premises relates to the categories and assessed production capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in licence L9417/2023/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in licence L9417/2023/1.

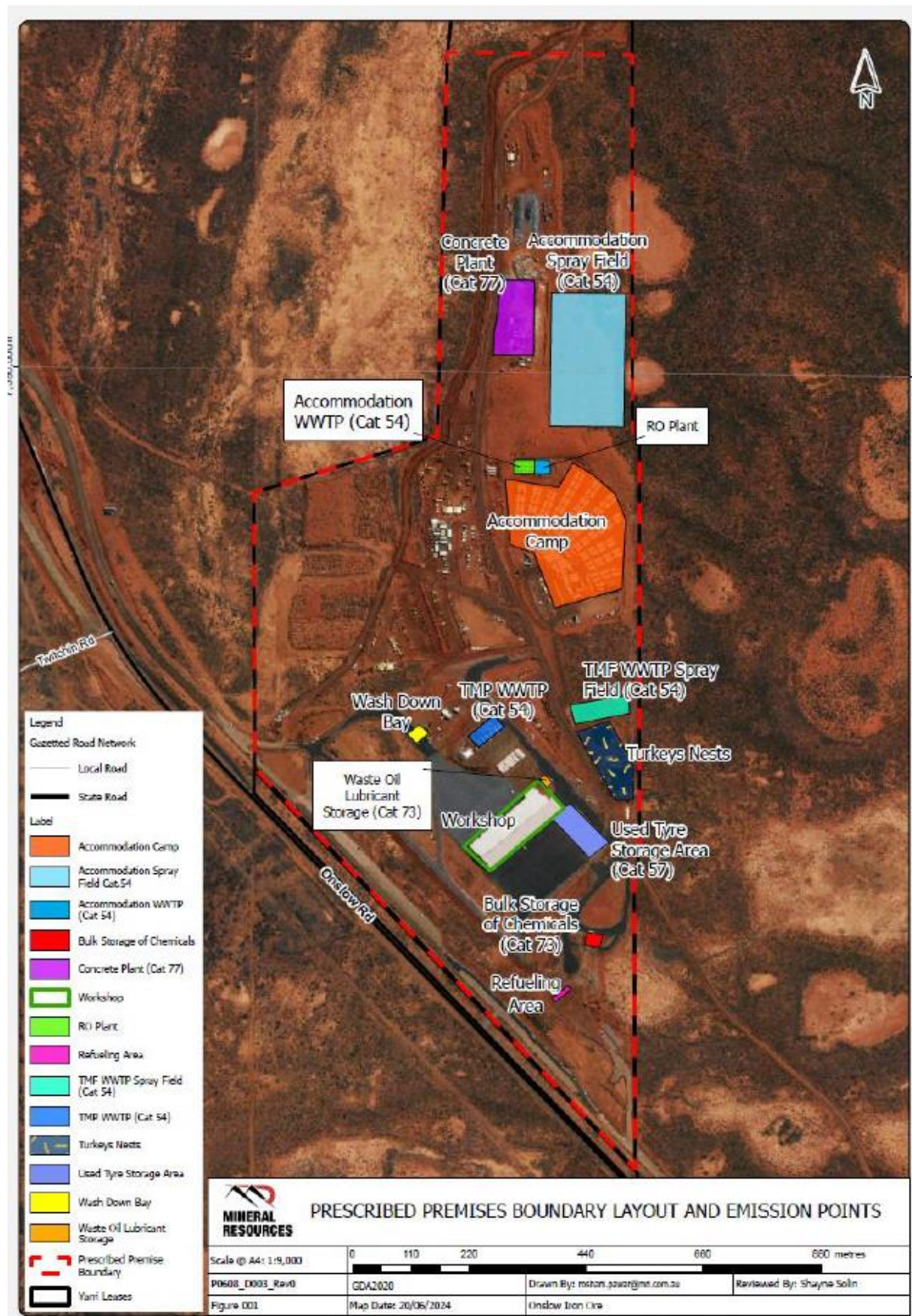


Figure 1: Prescribed Premises and location of activities



## 2.3 Category 12 – Mobile Crushing and Screening Plant

The mobile plant was assessed and approved under works approval W6726/2022/1, however, it is yet to be constructed, and the applicant has requested that the conditions to construct are transferred to the licence in this amendment. This transfer of the construction requirements to the licence allows for a flexible timeframe in commencing the installation of the crushing and screening plant. As the plant is not yet required and, when required will not require extensive construction or commissioning, the works approval may expire prior to the plant being installed.

The plant will have an operational capacity of 2 million tonnes per annum (Mtpa) and will predominately be operated during daylight hours, however contingency for operation on a 24 hr/day basis was included in the original work approval in the event operation after dark is required.

The configuration of the mobile plant will be adjusted as required to produce most efficiently each of the material types to the design specification required for end use. If used, the screen will be configured to separate the material to produce the target particle size required for end use.

The input sand material will be loaded with front-end loaders onto tip trucks. Screening will only occur for product sizing, if required. The end product is a sized and cleaned sand material, free from any organic substance. The mobile plant is required for approximately 18 months.

## 2.4 Category 54 – Sewage Facility

Treated wastewater from the Truck Maintenance Facility (TMF) Wastewater Treatment Plant (WWTP) is already authorised under L9417/2023/1 for discharge to a 0.17-hectare (ha) dripper field. However, operational requirements have led to the TMF being designed to direct treated wastewater to a 0.31 ha spray field instead of a dripper field. This spray field will fall within the previously approved dripper field area.

The applicant is seeking to amend the process limits, specifications, and associated infrastructure, equipment, and operational requirements outlined in L9417/2023/1 to reflect this change, maintaining a minimum spray field size of 0.17 ha. The initial dripper irrigation area has now been repurposed into a spray field irrigation system. Although the TMF irrigation area remains valid at a minimum of 0.17 ha, it has been expanded to 0.31 ha (including a 5 m buffer), as authorised by the Department of Health (DoH) on 28 May 2024.

Wastewater spray field evaporation is a common practice in the mining industry for managing wastewater. The spray field will increase evaporation rates by spraying wastewater into the air, breaking it into fine droplets that maximize exposure to the atmosphere. These droplets interact directly with ambient air, allowing water molecules to absorb heat and wind energy, which accelerates evaporation. As the droplets gain energy, they transition from liquid to vapor, leading to an enhanced evaporation rate. This method effectively reduces wastewater volume.

Spray wastewater evaporation potential environmental impacts include air emissions and the handling of concentrated waste. Industries utilising this method must adhere to local, regional, and national regulations regarding wastewater management, including allowable discharge limits and disposal practices.

## 2.5 Category 57 – Used Tyre Storage

A used tyre storage area was constructed under W6726/2022/1. Up to 2,800 used tyres will be stored on-site at any one time before being transported to an approved tyre disposal facility. The storage area features a compacted earthen base.

The storage of used tyres will comply with the Department of Fire and Emergency Services (DFES) Guidance Note GN02 *Bulk Storage of Rubber Tyres Including Shredding and Crumbed Tyres* (DFES 2020), ensuring adequate separation distances and that tyre stacks do not exceed maximum height and area requirements. These controls assist in reducing fire risk and size of fire if one occurs.

The on-site storage will primarily consist of prime mover tyres, with the following sizes:

- Steer tyre: 385/65 R22.5
- Rear/trailer tyre: 315/80 R22.5

Additionally, light vehicle tyres and support vehicle tyres of various sizes will be stored in smaller quantities. The used tyre storage facility will operate 24 hours a day to support ongoing operations as needed.

## 2.6 Category 73 – Bulk storage of Chemicals

The licence holder is seeking approval to construct and operate bulk chemical storage tanks for diesel and oil, with a combined total capacity of 2,210 m<sup>3</sup>. During the facility's operational phase, up to six 200 kL bulk diesel storage tanks may be required to support mining activities and ensure smooth operation. Currently, four tanks have been constructed, and approval is being sought for future expansion to accommodate up to six 200 kL diesel tanks (1,200 m<sup>3</sup> total storage). All tanks will be double-skinned and constructed in accordance with AS 1692-2006 – *Steel tanks for flammable and combustible liquids*. The facility will operate 24/7 to support ongoing operations.

### Compliance with Works Approval W6726/2022/1

Compliance documentation was submitted to the Department on 6 June 2024. After assessment, the Department identified several deviations from the approved works, including:

- Only 4 of the 6 approved 200 kL tanks were installed. The Department understands the remaining 2 tanks may be added later if operational needs arise for Mineral Resources.
- Six 11.68 kL tanks were installed instead of the approved 12 x 71 kL tanks.
- A 76 kL tank was installed for waste oil storage instead of the approved 110 kL tank, with no explanation provided.
- The diesel storage tanks were installed approximately 40 meters from the approved location in works approval W6726/2022/1 and were also rotated. The Department notes that this adjustment was made to accommodate a truck turnaround road for accessing the tanks.

These non-compliances were recorded for documentation, and no further action was deemed necessary as the deviations did not alter the infrastructure's risk profile.

## 2.7 Category 77 – Concrete Batching and the surrender of Registration R2549/2023/1

Registration R2549/2023/1, allowing the operation of Category 77 infrastructure, was approved on 20 December 2023. On 12 August 2024, the licence holder submitted a request to the Department to relinquish this registration. The applicant intends to incorporate the Category 77 infrastructure from Registration R2549/2023/1 into Licence L9417/2023/1.

The concrete batching plant, with a capacity of 60 m<sup>3</sup>/hr, will primarily operate during daylight hours to support construction activities for the project. However, 24-hour operation may be required, and this will be assessed in this report. The concrete produced will be used both on-site and at other locations owned by the licence holder.

The plant is a Transcrete mobile silo system, capable of operating independently or in sequence with other plants. It will be operated in accordance with the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998*.

After the material is mined and screened at the crushing and screening plant, it will be stockpiled in surge piles near the concrete batching plant. Enclosed augers will transfer the material to feed hoppers, which will then move it to storage silos within an enclosed system. The silo filling process is equipped with bindicator paddles and butterfly valves, which will trigger alarms and halt delivery in case of overflow. A process filter system and overflow protection will be active throughout the processing circuit to control dust emissions.

### 3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

#### 3.1 Source-pathways and receptors

##### Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

**Table 1: Proposed applicant controls**

Emission	Sources	Potential pathways	Proposed controls
<b>Construction (Category 12 activities previously assessed and approved under W6726/2022/1)</b>			
Dust	Construction activities, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air/windborne pathway	No additional dust control measures proposed during construction.
Noise	Construction activities, vehicle movements, reversing alarms and diesel generators	Air/windborne pathway	<ul style="list-style-type: none"> <li>No additional noise control measures required during construction as separation distance to nearest sensitive receptor is over 5 km</li> <li>Noise emissions associated with construction will be localised to the work area and are expected to be minimal</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
Sedimentation	Sedimentation during high rainfall events	Direct discharge to land with surface runoff into nearby water courses and native vegetation	<ul style="list-style-type: none"> <li>Surface water infrastructure to be constructed to contain a 10-year Annual Exceedance Probability (AEP)</li> <li>Inlet and outlets to culverts will be rock pitched to minimise scour and erosion</li> <li>Stormwater diversion drain and settling pond constructed to divert flow during high rainfall events</li> <li>Site will be bunded to divert uncontaminated stormwater away from area with potential contaminants</li> </ul>
<b>Operation</b>			
<b>Category 12 – Crushing and Screening</b>			
Dust	Crushing of material, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air/windborne pathway	<ul style="list-style-type: none"> <li>As required, feed material will be conditioned by the water cart prior to being fed into the screens.</li> <li>Operating water carts will dampen work areas and surface mining equipment running tracks</li> <li>Operate dust suppression systems on strategic points of the crusher and screening plant and concrete batching plant to dampen material.</li> <li>Minimise drop heights on stockpile.</li> <li>Dust suppression on conveyors.</li> <li>Shut down of plant if wind conditions are generating negative impacts offsite.</li> </ul> <p><u>Proposed Monitoring</u></p> <ul style="list-style-type: none"> <li>Visual monitoring for generation of dust</li> <li>An assessment/inspection prior to the commencement of each work shift (and throughout the day) on the potential for dust generation, considering the nature of activities on site and predicted weather conditions</li> </ul>



Emission	Sources	Potential pathways	Proposed controls
			<ul style="list-style-type: none"> <li>If visible dust emissions are noted outside of the area where the prescribed activity is located then an assessment of the source will be made and additional water will be applied to key source areas, or alternative treatments applied</li> <li>An incident reporting system will be maintained to assist in managing environmental incidents such as dust complaints.</li> </ul>
Sedimentation, hydrocarbon runoff	<p>Sedimentation during high rainfall events</p> <p>Containment loss and spills of diesel and oils from hydrocarbon storage area and vehicle refueling</p>	<p>Direct discharge to land with surface runoff into nearby water courses and native vegetation</p> <p>Infiltration of oils and hydrocarbons through soil to groundwater</p>	<p><b><u>Existing controls set under works approval</u></b></p> <ul style="list-style-type: none"> <li>Stormwater diversion drain and settling pond constructed to divert flow during high rainfall events</li> <li>Site bunded to divert uncontaminated stormwater away from area with potential contaminants</li> <li>Refuelling of vehicles undertaken by service trucks in dedicated bunded areas</li> <li>Self-bunded tanks and containers</li> <li>"MinRes Incident Reporting Procedure" implemented to manage spills</li> <li>Spill kits available and employees trained to manage spills</li> <li>Fuel storage and handling will be in accordance with Australian Standards (AS 1940) and the <i>Dangerous Goods Safety Act 2004</i></li> </ul>
<b>Category 54</b>			
Sewage, partially treated sewage, wastewater	Containment loss from WWTP and associated pipelines	Direct discharge to land with surface runoff into nearby water courses and native vegetation	<p><b><u>Existing controls set under licence L9417/2023/1</u></b></p> <ul style="list-style-type: none"> <li>WWTP installed onto concrete or compacted earth pads</li> <li>Alarms installed to monitor high tank levels and pump failures</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
		Infiltration through soil to groundwater	<ul style="list-style-type: none"> <li>Visual inspection program</li> <li>A balance tank installed to include up to 1 day for flow to allow for maintenance</li> <li>Surface water flows managed to divert uncontaminated stormwater away from the WWTP footprint.</li> </ul> <u>No new controls proposed</u>
Treatment chemicals	Storage of WWTP treatment chemicals – containment loss		<p><b><u>Existing controls set under licence L9417/2023/1</u></b></p> <ul style="list-style-type: none"> <li>Chemicals to be stored in a dedicated bunded area in accordance with AS 1940 <i>The Storage and Handling of Flammable and Combustible Liquids</i></li> <li>Chemical spill kits to be kept at the premises at all times.</li> </ul> <u>No new controls proposed</u>
<b>Category 57</b>			
Air emissions such as VOCs, polycyclic aromatic hydrocarbons (PAH), dioxins, ash, nitrogen oxide and carbon oxides	Burning tyres in the event of a fire	Air/windborne pathway	<ul style="list-style-type: none"> <li>Designed and Operated in accordance with DFES Guidance Note (GN02) - <i>Bulk storage of Rubber Tyres Including Shredded and Crumbed Tyres</i></li> <li>Stormwater and firefighting run off directed into sediment ponds,</li> </ul>
Pyrolytic oils containing hydrocarbons, metals and particulate matter	Burning tyres and firefighting wash water runoff in the event of a fire	Direct discharge to land with surface runoff into nearby water courses and native vegetation	<ul style="list-style-type: none"> <li>Surface water management around site, preventing uncontrolled discharge;</li> <li>Use of temporary bunding if necessary in emergency to contain contaminated water</li> <li>Firefighting equipment on site;</li> <li>Hot works permit for any activities with the potential to cause fires.</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
<b>Category 73</b>			
Uncontrolled hydrocarbon discharges	Containment loss and spills of diesel and oils from hydrocarbon storage area and vehicle refueling	Direct discharge to land with surface runoff into nearby water courses and native vegetation Infiltration through soil to groundwater	<p><b>Management Controls</b></p> <ul style="list-style-type: none"> <li>Operate in accordance with the <i>Dangerous Goods Safety Act 2004</i> and Fuel storage and handling will be in accordance with Australian Standards (AS 1940).</li> <li>Refuelling restricted to dedicated refuelling areas.</li> <li>Any fuel spills to be cleaned up immediately with fuel affected material stored in appropriate waste receptacles in a bunded area pending removal offsite.</li> <li>Spill kits will be checked on a regular basis and maintained in good order.</li> <li>Implement spill response procedures.</li> </ul> <p><b>Proposed Monitoring</b></p> <ul style="list-style-type: none"> <li>Regular inspections of hydrocarbon storage and refuelling area.</li> <li>Spillages of hydrocarbons occurring as a result of incident or equipment failures will be addressed and reported through the MinRes incident reporting procedure.</li> </ul>
<b>Category 77</b>			
Dust	Lift-off from uncovered stockpiles, conveyors, silos and vehicle movement	Air/windborne pathway	<ul style="list-style-type: none"> <li>A water cart to spray down stockpiles and trafficable areas when required</li> <li>Spray units fitted to conveyors and crushing units</li> <li>Enclosed circuit for material transfer</li> <li>Venting filters equipped to silos</li> <li>Silo fill process has level monitoring, overflow alarms and delivery shut-off valve</li> </ul>

Emission	Sources	Potential pathways	Proposed controls
concrete slurry / sediment	Release of concrete slurry Sedimentation during high rainfall events	Direct discharge to land with surface runoff into nearby water courses and native vegetation	<ul style="list-style-type: none"> <li>All water used in the concrete batching process or washing of trucks collected and recycled back into the plant</li> <li>Wash-down sump and the wedge pit periodically cleaned to prevent excessive build up and maintain capacity</li> </ul>

## Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 2 and Figure 1 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental Siting* (DWER 2020)). The closest town of Onslow is located 14 km north of the premises. Due to the distance, the town is not considered a receptor and will not be included as part of this assessment.

**Table 2: Sensitive human and environmental receptors and distance from prescribed activity**

Human receptors	Distance from prescribed activity
Peedamulla Pastoral Station (N050350) (cattle)	Site is within Peedamulla pastoral lease boundary Cattle are located on the pastoral station. The Applicant notes that the project has been fenced with cattle grids on all entry points, and additional security fencing will be installed around the truck maintenance facility to prevent cattle from entering the area. <b>Cattle have not been considered in this risk assessment.</b>
Chevron Wheatstone Accommodation Camp	5km west of the premises <b>Screened out due to distance – emissions are not expected to impact on this receptor.</b>
Minderoo Pastoral Station (cattle)	9 m west of premises boundary. Minderoo Homestead 22km southeast The Homestead has been screened out due to distance. Cattle are located on the pastoral station. The Applicant notes that the project has been fenced with cattle grids on all entry points, and additional security fencing will be installed around the truck maintenance facility to prevent cattle from entering the area. <b>Pastoral station still considered as a receptor due to distance from activities.</b>

Human receptors	Distance from prescribed activity
<ul style="list-style-type: none"> <li>Heritage</li> <li>THALANYJI Native Title Determination area (WC 1999/045)</li> </ul>	<ul style="list-style-type: none"> <li>Artifacts/Scatter – ID 5949 – 2.5 km east from premises</li> <li>80 m from premises</li> </ul>
Ashburton North Strategic Industrial Area (ANSIA) Industry Protection Zone	Premises is within ANSIA Industrial Protection Zone
Horizon Power (human receptors)	1.3 km west
Environmental receptors	Distance from prescribed activity
Pilbara Surface Water Area (SWA30)	Premises is within SWA30 boundary
Pilbara Groundwater Area Localised groundwater	Depth to groundwater within the Premises area is between 3.58 – 7.47 mbgl
Threatened fauna	<p>Located in fauna surveys conducted on site</p> <ul style="list-style-type: none"> <li>Brush-tailed Mulgara - <i>Dasymercus blythi</i> potential tracks recorded during fauna survey</li> </ul> <p>Suitable habitat for the following species:</p> <ul style="list-style-type: none"> <li>Australia Bustard - <i>Ardeotis australis</i></li> <li>Keeled-slide - <i>Lerista planiventralis</i> subsp. <i>maryani</i></li> </ul>
Surface waterlines	<p>No waterlines cross the premises boundary</p> <p>Closest waterline ~350 m northwest from the premises</p> <p><b>Numerous non-perennial lakes occur in the region of the Project site, the closest approximately 150m to the southwest of the Project site.</b></p>
Adjacent vegetation	<p>Surrounds the premises and ranges from pristine to disturbed.</p> <p>Hummock grasslands, shrub steppe; scattered shrubs over <i>Triodia basedowii</i>.”</p> <p><b>Dune Land System:</b> Dune field supporting soft spinifex grasslands.</p> <p><b>Onslow Land System:</b> Undulating sand plains, dunes and level clay pans supporting soft spinifex grasslands and minor tussock grasses.</p> <p>No Priority Flora species were recorded within the survey area.</p>



### 3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Licence L9417/2023/1 that accompanies this decision report authorises emissions associated with the operation of the premises i.e. Category 12, 54, 57, 73 and 77 activities. The conditions in the issued licence, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

**Table 3: Risk assessment of potential emissions and discharges from the premises during construction and operation**

Risk Event					Risk rating <sup>1</sup>  C = consequence  L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction (Category 12 activities previously assessed and approved under W6726/2022/1)								
Placement of infrastructure and equipment including vehicle movements (reversing beepers).  Earthworks and associated preparation	Dust and noise	Air/windborne pathway causing impacts to health and amenity, impacts to vegetation health and impacts to ecosystems	Horizon Power (human receptors)  Native title holders  Adjacent vegetation	Refer to Section 3.1	C = Minor  L = Possible <b>Medium Risk</b>	Y	Condition 1 – Installation Requirements	N/A
			Threatened fauna		C = Moderate  L = Unlikely <b>Medium Risk</b>			

Risk Event					Risk rating <sup>1</sup>  C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Stormwater runoff	Sedimentation	Overland runoff potentially causing ecosystem disturbance, impacting surface water quality, or impacts to vegetation health	Surface waterlines	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>	Y	Condition 1 – Installation Requirements	N/A
			Adjacent vegetation					
			Threatened fauna Pilbara Surface Water Area (SWA30) – Premises is located within SWA30 boundaries	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>			
Operation								
Screening, crushing, unloading, loading and storage of material  - Jaw crusher - Cone crusher - Horizontal screener - Mounted mobile conveyor  Vehicle movements (including reversing alarms)  Running of machinery (conveyors, pumps etc.)	Dust	Air/windborne pathway causing impacts to health and amenity, impacts to vegetation health, impacts to ecosystems	Horizon Power (human receptors)	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Condition 1 – Installation Requirements  Condition 7 – Operation Requirements  Conditions 8 and 9 – spill management	N/A
	Noise		Adjacent vegetation Threatened fauna					
	Sediment / hydrocarbon discharge	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality  Infiltration of oils and hydrocarbons through soil causing contamination to groundwater	Surface waterlines Groundwater Adjacent vegetation	Refer to Section 3.1	C = Minor L = Unlikely <b>Medium Risk</b>			

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Screening, crushing, unloading, loading and storage of material <ul style="list-style-type: none"> <li>- Jaw crusher</li> <li>- Cone crusher</li> <li>- Horizontal screener</li> <li>- Mounted mobile conveyor</li> </ul> Vehicle movements (including reversing alarms) Running of machinery (conveyors, pumps etc.)	Sediment / hydrocarbon discharge	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality  Infiltration of oils and hydrocarbons through soil causing contamination to groundwater	Pilbara Surface Water Area (SWA30) – Premises is located within SWA30 boundaries  Threatened fauna	Refer to Section 3.1	C = Moderate L = Unlikely <b>Medium Risk</b>	Y	Condition 1 – Installation Requirements  Condition 7 – Operation Requirements  Conditions 8 and 9 – spill management	N/A
Storage of used tyres	Air emissions from combustion including VOCs, polycyclic aromatic hydrocarbons (PAH), dioxins, ash, nitrogen oxide and carbon oxides	Air/windborne pathway causing impacts to health and amenity, ash drop out into surface waters and onto vegetation	Horizon Power (human receptors)  Threatened fauna  Nearby surface waters  Adjacent vegetation	Refer to Section 3.1	C = Major L = Rare <b>Medium Risk</b>	Y	Condition 7 – Operation Requirements	N/A
	Contaminated fire wash waters including pyrolytic oils containing hydrocarbons, metals, PFAS and particulate matter	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality  Infiltration through soil causing contamination to groundwater	Nearby surface water  Native vegetation  Groundwater	Refer to Section 3.1	C = Major L = Rare <b>Medium Risk</b>	Y		

Risk Event					Risk rating <sup>1</sup> C = consequence L = likelihood	Applicant controls sufficient?	Conditions <sup>2</sup> of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Fuel storage area – unplanned fuel storage leaks, delivery and refuelling activities	Hydrocarbon discharge	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Nearby surface water Groundwater	Refer to Section 3.1	C = Minor L = Possible <b>Medium Risk</b>	Y	Condition 7 – Operation Requirements Conditions 8 and 9 – spill management	N/A
Sediment during high rainfall events Concrete slurry discharge event	Sediment	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Nearby surface water	Refer to Section 3.1	C = Slight L = Possible <b>Low Risk</b>	Y	Condition 7 – Operation Requirements Conditions 8 and 9 – spill management	N/A
	Concrete slurry	Overland runoff potentially causing ecosystem disturbance	Native vegetation Threatened fauna		C = Minor L = Possible <b>Medium Risk</b>			
Discharge to spray field.	Irrigation of treated wastewater combined with RO discharge	Direct planned discharges to spray fields potentially leading to soil contamination, eutrophication and impacts to groundwater quality	Groundwater Surrounding soils	Refer to Section 3.1	C = Minor L = Unlikely <b>Low Risk</b>	Y	Condition 6 – Waste processing Condition 7 – Operation Requirements Conditions 8 and 9 – spill management Condition 10 – discharge locations	N/A
		Direct planned discharges to spray fields potentially leading to soil contamination and decline in vegetation health	Adjacent vegetation Threatened fauna		C = Major L = Unlikely <b>Medium Risk</b>			

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

## 4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

**Table 4: Consultation**

Consultation method	Comments received	Department response
Application advertised on the department's website on 20 August 2021	None received	N/A
Applicant was provided with draft documents on 2 December 2024	<b><u>Licence condition 1</u></b> Change reference from works approval holder to licence holder, and include part (a) into first line of condition so that it reads: <i>The licence holder must construct and/or install the infrastructure and/or equipment:</i> (a) <i>in accordance with the corresponding design and construction / installation requirements;</i> (b) <i>at the corresponding infrastructure location; and</i> (c) <i>within the corresponding time frame.</i> <i>as set out in Table 1</i>	Condition updated as requested
	<b><u>Licence condition 1, Table 1, Mobile crushing and screening plant</u></b> Infrastructure location will be within the prescribed premises boundary, rather than a specific location shown on Figure 2 of Schedule 1. Please amend to read within prescribed premises boundary.	Noted and updated.
	<b><u>Licence condition 1, Table 1, Diesel and oil storage facilities</u></b> The Licence amendment application sought approval for the installation of the remaining 2x 200 kL diesel storage tanks that were originally included in Works Approval W6726/2022/1. Request for these to be included in the licence.	Noted and updated.
	<b><u>Licence condition 5</u></b> As sewage waste isn't accepted onto the premises from other premises, rather it is being generated on the premises, the Applicant proposes for following amended wording: " <i>The licence holder must only accept waste to the WWTP of a type that:</i> "	Noted and updated.
	<b><u>Licence condition 5</u></b> Missing reference to table number. Please update.	Noted and updated.



	<p><b><u>Licence condition 6</u></b></p> <p>Missing reference to table number. Please update.</p>	Noted and updated.
	<p><b><u>Licence condition 7, Table 4, Mobile crushing and screening plant</u></b></p> <p>Infrastructure location will be within the prescribed premises boundary, rather than a specific location shown on Figure 2 of Schedule 1. Please amend to read within prescribed premises boundary.</p>	Noted and updated.
	<p><b><u>Licence condition 7, Table 4, Wastewater Treatment Plant (WWTP)</u></b></p> <p>Operational requirement of WWTP, please amend the following bullet points:</p> <ul style="list-style-type: none"> <li>• Treated up to 106 m<sup>3</sup>/day for combined WWTPs.</li> <li>• Accommodation WWTP (AWWTP) treat up to 100 m<sup>3</sup>/day of raw sewage.</li> <li>• Truck Maintenance Facility (TMF) WWTP treat up to 6 m<sup>3</sup>/day of raw sewage.</li> <li>• Remove reference to the WWTP treating brine. The WWTP does not treat brine, rather the brine is co-disposed with treated effluent to the AWWTP spray field, as detailed further up in Table 4.</li> <li>• Remove reference to storing WWTP chemicals in accordance with Australian Standard 1940, as the chemicals stored at the WWTP are corrosive chemicals, such as chlorinated agents and coagulants. All dosing containers (sodium hypochlorite, poly aluminium chloride (PAC)) are bunded, as detailed in the compliance report. WWTP chemicals to be bunded and stored in accordance with AS 3780-1994.</li> </ul>	<p>Noted and updated.</p> <p>A requirement for WWTP to be stored in accordance with AS 3780-2008 has been included to replace the previous requirement.</p>
	<p><b><u>Licence condition 7, Table 4, Used tyre storage area</u></b></p> <p>Amend bullet point four, to read: <i>A minimum separation distance of 18 m must be maintained between each 'tyre pile' and 'tyre stacks' should be at least 18 m from combustible structures or materials.</i></p>	Noted and updated where required.
	<p><b><u>Licence condition 7, Table 4, Diesel and oil storage facilities</u></b></p> <p>Amend bullet point one to read: up to 6x 200kL double skinned bulk diesel storage tanks.</p>	Noted and updated.
	<p><b><u>Schedule 1 Monitoring Map</u></b></p> <p>Please remove the Monitoring map from Schedule 1, this has been superseded by Figure 2.</p>	Noted and updated.

	<p><b><u>Amendment Report: Section 3.1 – Receptors.</u></b>  <b><u>Table 2. Peedamulla Pastoral Station and Minderoo Pastoral Station</u></b></p> <p>Cattle are located on the pastoral station. The Applicant notes that the project has been fenced with cattle grids on all entry points, and additional security fencing will be installed around the truck maintenance facility to prevent cattle from entering the area.</p> <p>A Minderoo groundwater bore is located approximately 4.9 km to the south of the premises boundary. Due to the distance from the premises to this bore, this is not considered to be a receptor.</p>	Noted. The Amendment Report has been updated.
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## 5. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that the application to renew licence L9417/2023/1 will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

### 5.1 Summary of amendments

Table 5 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

**Table 5: Summary of licence amendments**

Condition no.	Proposed amendments
Front page	Addition of categories 12, 57, 73 and 77 to Licence.
1, 2, 3, 4	Addition of crushing and screening infrastructure installation/ construction requirements and the associated compliance reporting conditions (conditions 2-4).
6 (Table 3)	Updating discharge location from TMF Dripper Field to TMF WWTP Spray Field.
7 (Table 4)	<p>Inclusion of operational requirements for the following infrastructure:</p> <ul style="list-style-type: none"> <li>• TMF spray field (including amendments to spray field area, irrigation and run-off requirements);</li> <li>• Mobile crushing and screening plant;</li> <li>• Wastewater treatment plant;</li> <li>• Treated wastewater spray field;</li> <li>• Used tyre storage area;</li> <li>• Diesel and oil storage facilities;</li> <li>• Stormwater management; and</li> <li>• Mobile concrete batching plant.</li> </ul>
8	Updates to spill management to include concrete/cement slurry and hydrocarbons
10 (Table 5)	Updating map reference

Condition no.	Proposed amendments
11 (Table 6)	Including TMF Spray Field discharge as a monitoring requirement
Whole licence	Updates to Condition and/or Table numbers were required.

## References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Environmental Protection Authority (EPA) 2018, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual*, Environmental Protection Authority, Perth, WA.
5. Snooks & Co 2002, *Style Manual for Authors*, 6th Edn, John Wiley & Sons Australia Ltd, Brisbane.